IN THE CLAIMS:

Please cancel Claims 3, 9, 13 and 14 without prejudice or disclaimer of subject matter. Please amend the remaining claims as follows:

1. (Currently Amended) An optical scanning apparatus, comprising:

light source means;

an incident optical system for temporarily focusing a beam emitted from the light source means in a sub-scanning section to form a linear image on a deflection surface of a light deflector; and

a scanning optical system for guiding the beam deflected by the light deflector onto a surface to be scanned, ~~wherein:~~

wherein the beam from the incident optical system is incident at an angle with a normal to the deflection surface in the sub-scanning section;

~~the scanning optical system has a scanning optical element having a refractive power in the sub-scanning section; and~~

wherein the imaging magnification in the sub-scanning section of the scanning optical system is 0.7-fold or higher magnification in the entire scanning region and the scanning optical system includes a first scanning optical element having a refractive power in a main-scanning section and a second scanning optical element having a refractive power in the sub-scanning section, which weakens from an on-axis position to an off-axis position; and

wherein an optical axis of the scanning optical element is eccentric toward a deflection point side of the deflection surface with respect to a transmission position of a principal ray of the beam in a sub scanning direction to meet the following expression:

$$(\beta max - \beta min) < P/\Delta L$$

where βmax represents a maximum value of an imaging magnification in the sub-scanning section of an entire scanning region of the scanning optical system and βmin represents a minimum value of the imaging magnification in the sub-scanning section of the entire scanning region of the scanning optical system; P represents a pixel size defined according to a resolution in the sub-scanning section; and ΔL represents a distance between the normal to the deflection surface at the deflection point and the optical axis of the scanning optical element in the sub scanning direction.

2. (Currently Amended) An optical scanning apparatus according to claim 1, wherein the imaging magnification in the sub-scanning section of the scanning optical system is substantially constant within a range of ~~set to~~ ±10% or less in the entire scanning region.

3. (Cancelled)

4. (Currently Amended) An optical scanning apparatus according to ~~claim 3~~ claim 1, wherein in the sub-scanning section, the principal ray of the beam incident on the second scanning optical element enters the second scanning optical element at an angle

with an optical axis thereof and the optical axis of the second scanning optical element extends in parallel to the normal to the deflection surface.

5. (Currently Amended) A color image forming apparatus comprising an image bearing member arranged on a surface to be scanned of the optical scanning apparatus according to ~~any one of claims 1 to 4~~ claim 1 and adapted to form an image.

6. (Currently Amended) A color image forming apparatus according to claim 5, further comprising a printer controller that converts data ~~color~~ signals inputted from an external device into image data ~~in different colors~~ and inputs the image data to the optical scanning apparatus.

7. (Currently Amended) An optical scanning apparatus, comprising:

light source means for emitting a plurality of beams;

a plurality of incident optical systems each for temporarily focusing ~~the plurality of beams~~ a beam emitted from the light source means in a sub-scanning section to form a linear image on a deflection surface of a ~~common~~ light deflector; and

a plurality of scanning optical systems each for guiding ~~the plurality of beams~~ a beam deflected by the ~~common~~ light deflector onto a surface ~~different surfaces~~ to be scanned, ~~wherein:~~

~~the plurality of scanning optical systems have scanning optical elements each having a refractive power in the sub-scanning section;~~

wherein the imaging magnification in the sub-scanning section of the plurality of scanning optical systems is 0.7-fold or higher magnification in the entire scanning region and the plurality of scanning optical systems each include a first scanning optical element having a refractive power in a main-scanning section and a second scanning optical element having a refractive power in the sub-scanning section, which weakens from an on-axis position to an off-axis position;

wherein the plurality of beams incident on the ~~common~~ light deflector are incident at an angle with a normal to the deflection surface in the sub-scanning section; and

wherein each of an optical axis of the scanning optical elements of the plurality of scanning optical systems are eccentric toward a deflection point side of the deflection surface with respect to a transmission position of a principal ray of each of the plurality of beams in a sub scanning direction to meet the following expression:

$$(\beta max - \beta min) < P/\Delta L$$

where P represents a pixel size defined according to a resolution in the sub-scanning section; βmax represents a maximum value of a magnification in the sub-scanning section of an entire scanning region of the plurality of scanning optical systems and βmin represents a minimum value of the magnification in the sub-scanning section of the entire scanning region of the plurality of scanning optical systems; and ΔL represents a distance between the normal to the deflection surface at the deflection point and the optical axis of the scanning optical element in the sub scanning direction.

8. (Currently Amended) An optical scanning apparatus according to claim 7, wherein the imaging magnification in the sub-scanning section of the plurality of

scanning optical systems is substantially constant within a range of ~~set to~~ ±10% or less in the entire scanning region.

9. (Cancelled)

10. (Currently Amended) An optical scanning apparatus according to ~~claim 9~~ claim 7, wherein in the sub-scanning section, the principal ray of the beam incident on the second scanning optical element enters the second scanning optical element at an angle with an optical axis thereof and the optical axis of the second scanning optical element extends in parallel to the normal to the deflection surface.

11. (Currently Amended) A color image forming apparatus comprising a plurality of image bearing members each arranged on a surface to be scanned of the optical scanning apparatus according to claim 1 ~~any one of claims 1 to 7~~ and adapted to form images in colors different from one another.

12. (Original) A color image forming apparatus according to claim 11, further comprising a printer controller that converts color signals inputted from an external device into image data in different colors and inputs the image data to each optical scanning apparatus.

13. and 14. (Cancelled)

Please add Claims 15 to 30, as follows:

15. (New) An optical scanning apparatus, in which a deflection surface of a light deflector and a surface to be scanned are conjugate in a sub-scanning section, comprising:

light source means;

an incident optical system for guiding a beam emitted from the light source means to the deflection surface of the light deflector; and

a scanning optical system for guiding the beam deflected by the light deflector onto the surface to be scanned,

wherein the beam to be incident on the deflection surface of the light deflector is incident on the deflection surface at an angle with respect to a normal to the deflection surface in the sub-scanning section;

wherein scanning optical elements constituting the scanning optical system are all refractive scanning optical elements, the scanning optical system includes at least one scanning optical element having optical power in a sub-scanning direction, and an imaging magnification in the sub-scanning section of the scanning optical system is not less than 0.7-fold in an entire scanning region; and

wherein a surface vertex of the incident surface of the scanning optical element having optical power in the sub-scanning direction is decentered in the sub-scanning section toward a deflection point side of the deflection surface with respect to a transmission position of a principal ray of the beam so as to satisfy the following conditional expression,

$$(\beta_{max} - \beta_{min}) < P/\Delta L ,$$

where β_{max} and β_{min} represent a maximum value and a minimum value of the imaging magnification in the sub-scanning section in the entire scanning region of the scanning optical system, respectively, P represents a pixel size defined according to a resolution in the sub-scanning section, and ΔL represents a distance in the sub-scanning direction between the deflection point of the deflection surface and the surface vertex of the incident surface of the scanning optical element having an optical power in the sub-scanning direction.

16. (New) An optical scanning apparatus according to Claim 15, wherein the transmission-type scanning optical element is a scanning lens.

17. (New) An optical scanning apparatus according to Claim 15, wherein the scanning optical system further comprises a refractive scanning optical element having optical power in the main scanning direction, and wherein the scanning optical element having optical power in the sub-scanning direction gradually weakens from an on-axis position toward an off-axis position.

18. (New) An optical scanning apparatus according to Claim 17, wherein the principal ray of the beam to be incident on the scanning optical element having optical power in the sub-scanning direction is incident thereon at an angle with respect to an optical axis thereof, and the optical axis thereof is decentered in parallel to a normal to the deflection surface.

19. (New) An optical scanning apparatus according to Claim 17, wherein an optical axis of the scanning optical element having optical power in the sub-scanning direction is decentered rotationally.

20. (New) An optical scanning apparatus according to Claim 15, wherein the light source means includes a plurality of emitting portions.

21. (New) An image forming apparatus, comprising a photosensitive drum for forming an image, the photosensitive drum disposed on the surface to be scanned of an optical scanning apparatus according to Claim 15.

22. (New) An image forming apparatus according to Claim 21, further comprising a printer controller that converts data signals inputted from an external device to image data and inputs the image data to the optical scanning apparatus.

23. (New) An optical scanning apparatus, comprising:

a light deflector; and

a plurality of scanning optical systems each for guiding a beam deflected by a deflection surface of a light deflector onto a surface to be scanned, in which the deflection surface of the light deflector and the surface to be scanned are conjugate in a sub-scanning section,

wherein the beam to be incident on the deflection surface of the light deflector is incident on the deflection surface at an angle with respect to a normal to the deflection surface in the sub-scanning section;

wherein scanning optical elements constituting the plurality of scanning optical systems are all refractive scanning optical elements, the plurality of scanning optical systems each include at least one scanning optical element having an optical power in a sub-scanning direction, and an imaging magnification in the sub-scanning sections of each of the plurality of scanning optical systems is not less than 0.7-fold in respective entire scanning regions; and

wherein, in each of the plurality of the scanning optical systems, a surface vertex of the incident surface of the scanning optical element having optical power in the sub-scanning direction is decentered in the sub-scanning section toward a deflection point side of the deflection surface with respect to a transmission position of a principal ray of the beam so as to satisfy the following conditional expression,

$$(\beta_{max} - \beta_{min}) < P/\Delta L ,$$

where β_{max} and β_{min} represent a maximum value and a minimum value of the imaging magnification in the sub-scanning section in the entire scanning region of the scanning optical system, respectively, P represents a pixel size defined according to a resolution in the sub-scanning section in the scanning optical system, and ΔL represents a distance in the sub-scanning direction between the deflection point of the deflection surface and the surface vertex of the incident surface of the scanning optical element having an optical power in the sub-scanning direction.

24. (New) An optical scanning apparatus according to Claim 23, wherein the scanning optical element is a scanning lens.

25. (New) An optical scanning apparatus according to Claim 23, wherein each of the plurality of the scanning optical systems further comprises a refractive scanning optical element having optical power in the main scanning direction, and wherein the scanning optical element having optical power in the sub-scanning direction gradually weakens from an on-axis position toward an off-axis position.

26. (New) An optical scanning apparatus according to Claim 25, wherein the principal ray of the beam to be incident on the scanning optical element having optical power in the sub-scanning direction is incident thereon at an angle with respect to an optical axis thereof, and the optical axis thereof is decentered in parallel to a normal to the deflection surface.

27. (New) An optical scanning apparatus according to Claim 25, wherein an optical axis of the scanning optical element having optical power in the sub-scanning direction is decentered rotationally.

28. An optical scanning apparatus according to Claim 23, wherein a plurality of beams are guided to each of the surfaces to be scanned.

29. (New) A color image forming apparatus, comprising a plurality of photosensitive drums each for forming respective images different from each other in color, each of the plurality of the photosensitive drums disposed on the respective surfaces to be scanned, different from one another, of an optical scanning apparatus according to Claim 23.

30. (New) A color image forming apparatus according to Claim 29, further comprising a printer controller that converts data signals inputted from an external device to a plurality of image data different from one another in color and inputs the plurality of image data to the optical scanning apparatus.